## LISTING OF CLAIMS

Claim 1 (currently amended): A solid source method of growing a <u>homoepitaxial</u> SiC film within an MBE system having a growth chamber and effusion cells having shutters, comprising the steps of:

charging a first crucible with a quantity of Fullerenes; installing said first crucible into a first effusion cell; placing said first effusion cell into the growth chamber; coating a second crucible with a layer of SiC; charging said second crucible with a quantity of solid Si; installing said second crucible into a second effusion cell; placing said second effusion cell into the growth chamber; providing a 6H-SiC substrate; preparing said substrate by chemical-mechanical polishing; loading said substrate into the growth chamber; evacuating the growth chamber; heating said substrate to a temperature of about 1500° C; heating said first effusion cell to a temperature range of about 500°C to 650°C; heating said second effusion cell to a temperature above about 1500° C; and, growing a 6H-SiC homoepitaxial layer of SiC upon said substrate by controllably actuating the effusion cell shutters.

Claim 2 (canceled)

Claim 3 (canceled)

Claim 4 (canceled)

Claim 5 (canceled)

Claim 6 (currently amended): A solid source method of growing a <u>homoepitaxial</u> SiC film within an MBE system having a growth chamber and effusion cells having shutters, comprising the steps of:

charging a first crucible with a quantity of Fullerenes; installing said first crucible into a first effusion cell; placing said first effusion cell into the growth chamber; coating a second crucible with a layer of SiC; exposing said coated crucible to atmosphere; repeating said coating step above; charging said second crucible with a quantity of solid Si; installing said second crucible into a second effusion cell; placing said second effusion cell into the growth chamber; providing a SiC substrate; polishing said substrate; cleaning said substrate with pressurized CO<sub>2</sub>; etching said substrate; rinsing said substrate; drying said substrate with pressurized N<sub>2</sub>; loading said substrate into the growth chamber; evacuating the growth chamber; heating said substrate to a temperature of about 1500°C; heating said first effusion cell to a temperature range of about 500° to 650° C: heating said second effusion cell to a temperature above about 1500° C; and, growing a homoepitaxial layer of SiC upon said substrate by controllably actuating the effusion cell shutters.